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**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Docket Number (Optional)

44846

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name \_\_\_\_\_

Application Number

10/645.571

Filed

August 22, 2003

First Named Inventor

Hyun-Il Kwon

Art Unit

2616

Examiner

Xavier S Wong

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☒

attorney or agent of record.

Registration number 61,789

☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

Signature

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Typed or printed name

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Telephone number

March 17, 2008

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
Submit multiple forms if more than one signature is required, see below\*.

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\*Total of 3 forms are submitted.

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: :  
: :  
Hyun-Il Kwon et al. : Group Art Unit: 2616  
: :  
Serial No.: 10/645,571 : Examiner: Xavier S Wong  
: :  
Filed: August 22, 2003 : :  
: :  
For: APPARATUS AND METHOD FOR SYNCHRONIZATION ACQUISITION IN A  
MOBILE COMMUNICATION SYSTEM

ARGUMENTS FOR CONSIDERATION FILED CONCURRENTLY  
WITH PRE-APPEAL BRIEF REQUEST FOR REVIEW

Attn: Mail Stop AF  
P.O. Box 1450  
Alexandria, VA 22314

Sir:

In response to the unofficial Advisory Action of March 17, 2008 and the final Office Action of October 16, 2007, Applicants submit the following arguments for consideration with the concurrently filed Pre-Appeal Brief Request For Review.

**Remarks/Arguments:**

Claims 1, 2, 4, 6, 7 and 9 are rejected under 35 U.S.C. §102 (b) as allegedly being anticipated by U.S. Publication No. 2001/0006515 to Lee et al. (hereinafter Lee). Further, claims 3 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of U.S. Publication No. 2002/0032692 to Suzuki et al. (hereinafter Suzuki). Finally, claims 5 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of U.S. Publication No. 2002/0031169 to Lipponen et al. (hereinafter Lipponen). Applicants respectfully traverse these rejections.

**Claim 1**

Claim 1 recites:

“a controller for **determining a system mode** of a current Node B to which the UE belongs between the first system mode of the first Node B and the second system mode of the second Node B, and generating a system mode select signal in order to select **the determined system mode**; and

“a code generator for generating a synchronization code used in **the determined system mode** in response to the system mode select signal.”

In the Request For Reconsideration filed February 19, 2008 (hereinafter "RFR") in response to the final Office Action, Applicants argued that Lee does not disclose, teach, or suggest the code generator recited in claim 1 since Lee does not teach **a code generator capable of generating one of two types of synchronization codes**, each being used in one of the two system modes. The relevant portions of the RFR, which are on pages 2-6 of the RFR, are hereby incorporated by reference in their entirety.

In the unofficial Advisory Action, the Examiner maintains the rejection, appearing to argue that the term "the determined system mode" does not necessarily mean one mode out of two possible modes (or "two-way modes" as referred to by the Examiner), and thus read on any code generator that generates synchronization codes for one single type of mode, for example, the sync mode, such as the code generator disclosed in Lee that generates synchronization codes for only one single type of mode, which is the sync mode. Applicants respectfully disagree with the Examiner's interpretation of the term "the determined system mode".

Specifically, the term "the determined system mode" does have antecedent basis, which is provided in the claim recitation "a controller for **determining a system mode** of a current Node B to which the UE belongs between the first system mode of the first Node B and the second system mode of the second Node B". Hence, the term "the determined system mode", as recited in claim 1, refers to **the system mode determined between** "the first system mode of the first Node B and the second system mode of the second Node B". Consequently, "a code generator for generating a synchronization code used **in the determined system mode**" denotes a code generator for generating a synchronization code used in the system mode determined between the first system mode of the first Node B and the second system mode of the second Node B, which in turn denotes a code generator capable of generating **two types of synchronization codes**, one type of synchronization code being used in the first system mode of the first Node B, and the other type of synchronization code being used in the second system mode of the first Node B.

Lee, however, only teaches a code generator (PN Generator 407) capable of generating **one single type of synchronization code used only in the sync mode**, rather than

a code generator (PN Generator 407) capable of capable of generating **two types of synchronization codes**. *See pages 2-6 of the RFR for the details of our argument in this respect.* Therefore, Lee does not read on “a code generator for generating a synchronization code used **in the determined system mode** in response to the system mode select signal”, as recited in claim 1. Accordingly, Applicant respectfully submits that the anticipatory rejection of claim 1 should be withdrawn.

**Claims 2, 4, 6, 7 and 9**

Claim 6 contains similar recitations to claim 1 with respect to “generating a synchronization code used **in the determined system mode** in response to the system mode select signal.” Accordingly, the anticipatory rejection of claim 6 should also be withdrawn for at least the same reasons stated above in connection with claim 1. The rejection of claims 2, 4, 7 and 9 should also be withdrawn by virtue of their dependency from allowable claims 1 and 6 respectively.

**Claims 3 and 8**

Claims 3 and 8 depend from independent claims 1 and 6, and thus inherits all the limitations of claims 1 and 6. Suzuki is cited merely for disclosing secondary features. Suzuki, however, does not cure the deficiency of Lee discussed above relating to a code generator for generating a synchronization code used in the determined system mode in response to the system mode select signal. Accordingly, claims 3 and 8 should be allowable over Suzuki and Lee, and the rejection of claims 3 and 8 should therefore be withdrawn.

**Claims 5 and 10**

Applicants argued in the RFR that Lipponen does not disclose, teach, or suggest the features recited in claims 5 and 10. The relevant portions of the RFR, which are on pages 7-10, are hereby incorporated by reference in their entirety.

In the unofficial Advisory Action, however, the Examiner maintains the rejection of claims 5 and 10, appearing to argue that the feedback route in connection with register 3 (276) and register 5 (280), as disclosed in Lipponen, reads on the claim recitation “a feedback value is **input** to a **first number of shift registers** necessary for generating a synchronization code used in the first system mode **or to a second number of shift registers** necessary for

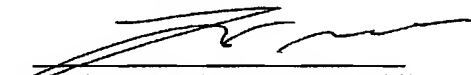
generating a synchronization code used in the second system mode” (emphasis added). Applicants respectfully disagree with the Examiner’s assessment.

Specifically, although Fig. 2C of Lipponen discloses a feedback route, this feedback route only involves a **single feedback input** into one register, that is, a feedback input into register 1 (272). The Examiner’s contention appears to have mistaken a “**feedback output**” for a “**feedback input**”, for both register 3 (276) and register 5 (280) only produce **feedback outputs**, which are then XORed to produce **the only feedback input** into one register, rather than take **feedback inputs**. Hence, Fig. 2C of Lipponen does not teach that “a feedback value is **input** to a **first number of shift registers** necessary for generating a synchronization code used in the first system mode or to a **second number of shift registers** necessary for generating a synchronization code used in the second system mode”, examples of which are illustrated in Figs. 9, 10A and 10B of the present application. Accordingly, the Examiner’s contention in relying on register 3 (276) and register 5 (280) of Lipponen is misplaced. In addition, Applicants point out that the Examiner does not address Applicants’ arguments filed in the RFR that Lipponen also fails to disclose the feedback controller as claimed and the synchronization code mask unit as claimed.

It is worth noting that the fact that Lipponen fails to disclose any of the elements recited in claim 5 is hardly surprising. Lipponen is only designed to generate various jumps used for a conventional code generator, whereas the present system is designed to use one code generator to generate two possible synchronization codes, each used in one of two different system modes.

Accordingly, claims 5 and 10 should be allowable over Lee and Lipponen by their own respective features, even without regard to the features that they inherit from claims 1 and 6. The rejection of claims 5 and 10 should therefore be withdrawn.

Respectfully submitted,

  
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March 17, 2008